Response to Office Action of March 15, 2006

Attorney Docket: ISCAT-005A

## Amendments to the Claims:

1. (currently amended) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

providing a an artificial lipid based media;

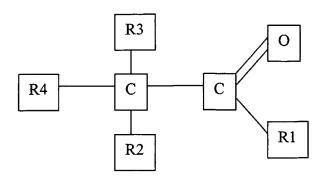
providing microorganisms, the microorganisms being associated with a skin of the host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid based media to produce modified lipid based media;

combining the lipid based media and the microorganisms; and collecting the modified lipid based media.

- 2. (original) The method of Claim 1 wherein the lipid based media contains a type of lipid found on a skin of the vertebrate host.
- 3. (original) The method of Claim 2 wherein the lipid based media contains a type of lipid found in the gland secretions of the vertebrate host.
- 4. (original) The method of Claim 3 wherein the lipid based media contains a type of lipid found in the sebaceous gland of the vertebrate host.
- 5. (original) The method of Claim 1 wherein the lipid based media is a type of lipid selected from the group consisting of glycerides, sterols, sterol esters, sterol phosphates, sterol precursors, wax, wax esters, wax alcohols, wax aldehydes and combinations thereof.
- 6. (original) The method of Claim 1 wherein the lipid based media is a type glyceride having the formula:

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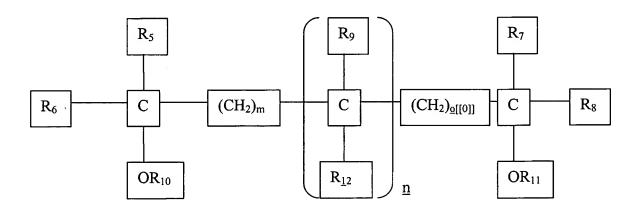
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wherein R1 is selected from the group consisting of Hydroxy, Alkyloxy, Amino, Alkylamino, Diakylamino, Arylamino, Diaryloxy, Halogen and Cyano; and

wherein R2, R3 and R4 is selected from the group consisting of Hydrogen, Alkyl and Aryl.

7. (Currently Amended) The method of Claim 1 wherein the lipid based media is a type of wax having the formula:



wherein  $R_5$  to  $R_{12}$  is selected from the group consisting of Hydrogen, Alkyl and Aryl;

wherein m and o are positive integers; and

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wherein  $\underline{n}$  d is at least zero.

- 8. (original) The method of Claim 1 wherein the lipid based media is a hydrolyzed lipid.
- 9. (original) The method of Claim 8 wherein the hydrolyzed lipid is selected from the group consisting of C10-C40 fatty acids, fatty alcohols, hydroxyacids and combinations thereof.
- 10. (original) The method of Claim 1 wherein the host skin associated microorganisms are generally distributed over the skin of the vertebrate host.
- 11. (original) The method of Claim 10 wherein the host skin associated microorganisms are resident and transient to the skin of the vertebrate host.
- 12. (original) The method of Claim 1 wherein the host skin associated microorganisms are capable of producing proteases, lipases, or cellulaeses.
- 13. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that hydrolyze lipids.
- 14. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce fatty acids.
- 15. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce fatty alcohols.
- 16. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce fatty aldehydes.
- 17. (original) The method of Claim 1 wherein the microorganisms are capable of producing enzymes that produce hydroxyacids.
  - 18. (original) The method of Claim 1 further comprising the step of:
    e. sterilizing the microorganisms.
- 19. (original) A vertebrate host mimic produced according the method of Claim 1.
- 20. (currently amended) A trap to ensnare arthropods which are parasitic to vertebrate hosts, the trap comprising:

an arthropod ensnaring device; and

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a vertebrate host mimic disposed adjacent the arthropod ensnaring device, the vertebrate host mimic produced according to the steps of:

- a. providing a an artificial lipid based media;
- b. providing microorganisms, the microorganisms being associated with a skin of the host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid based media to produce modified media;
  - c. combining the lipid based media and the microorganisms; and
  - d. collecting the modified lipid based media.
- 21. (original) The trap of Claim 20 wherein the vertebrate host mimic is enclosed within the arthropod ensnaring device.
- 22. (currently amended) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

providing a lipid based media;

providing enzymes, the enzymes being of a type excreted by microorganisms associated with a skin of the host vertebrate and the excreted enzymes microorganism being operative to modify the lipid based media upon combination with the lipid based media to produce modified lipid based media;

combining the lipid based media and the enzymes; and collecting the modified lipid based media.

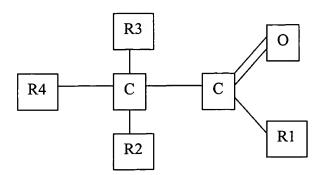
- 23. (original) The method of Claim 22 wherein the lipid based media contains a type of lipid found on a skin of the vertebrate host.
- 24. (original) The method of Claim 23 wherein the lipid based media contains a type of lipid found in the gland secretions of the vertebrate host.
- 25. (original) The method of Claim 24 wherein the lipid based media contains a type of lipid found in the sebaceous gland of the vertebrate host.
- 26. (original) The method of Claim 22 wherein the lipid based media is a type of lipid selected from the group consisting of glycerides, sterols, sterol esters, sterol

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phosphates, sterol precursors, wax, wax esters, wax alcohols, wax aldehydes and combinations thereof.

27. (original) The method of Claim 22 wherein the lipid based media is a type of glyceride having the formula:



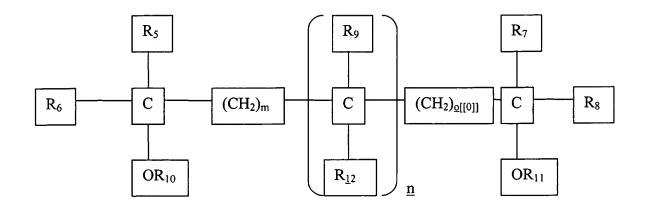
wherein R1 is selected from the group consisting of Hydroxy, Alkyloxy, Amino, Alkylamino, Diakylamino, Arylamino, Diaryloxy, Halogen and Cyano; and

wherein R2, R3 and R4 is selected from the group consisting of Hydrogen, Alkyl and Aryl.

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28. (Currently Amended) The method of Claim 22 wherein the lipid based media is a type of wax having the formula:



wherein  $R_5$  to  $R_{12}$  is selected from the group consisting of Hydrogen, Alkyl and Aryl;

wherein m and o are positive integers; and wherein  $\underline{n}$   $\underline{d}$  is at least zero.

- 29. (original) The method of Claim 22 wherein the lipid based media is a type of hydrolyzed lipid.
- 30. (original) The method of Claim 29 wherein the hydrolyzed lipid is selected from the group consisting of C10-C40 fatty acids, fatty alcohols, hydroxyacids and combinations thereof.
- 31. (original) The method of Claim 22 wherein the host skin associated microorganisms are generally distributed over the skin of the vertebrate host.
- 32. (original) The method of Claim 31 wherein the host skin associated microorganisms are resident and transient to the skin of the vertebrate host.
- 33. (original) The method of Claim 22 wherein the microorganisms are capable of producing proteases, lipases, or cellulaeses.

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- 34. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that hydrolyze lipids.
- 35. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce fatty acids.
- 36. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce fatty alcohols.
- 37. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce fatty aldehydes.
- 38. (original) The method of Claim 22 wherein the microorganisms are capable of producing enzymes that produce hydroxyacids.
  - 39. (original) The method of Claim 22 further comprising the step of:e. sterilizing the microorganisms.
- 40. (original) A vertebrate host mimic produced according the method of Claim 22.
- 41. (currently amended) A trap to ensnare arthropods which are parasitic to vertebrate hosts, the trap comprising:

an arthropod ensnaring device; and

a vertebrate host mimic disposed adjacent the arthropod ensnaring device, the vertebrate host mimic produced according to the steps of:

- a. providing a lipid based media;
- b. providing enzymes, the enzymes being of a type excreted by microorganisms associated with a skin of the host vertebrate and the excreted enzymes microorganism being operative to modify the lipid based media upon combination with the lipid based media to produce modified lipid based media;
  - c. combining the lipid based media and the enzymes; and
  - d. collecting the modified lipid based media.
- 42. (original) The trap of Claim 41 wherein the vertebrate host mimic is enclosed within the arthropod ensnaring device.

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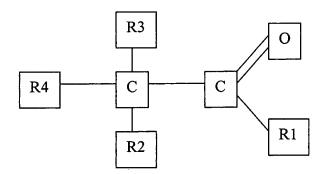
43. (new) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

providing a lipid selected from the group consisting of glycerides, sterols, sterol esters, sterol phosphates, sterol precursors, wax, wax esters, wax alcohols, and wax aldehydes;

providing microorganisms, the microorganisms being associated with a skin of the host vertebrate and operative to excrete sub-products which modify the media upon combination with the lipid to produce a modified lipid;

combining the lipid and the microorganisms; and collecting the modified lipid.

44. (new) The method of Claim 43 wherein the lipid is a type of glyceride having the formula:

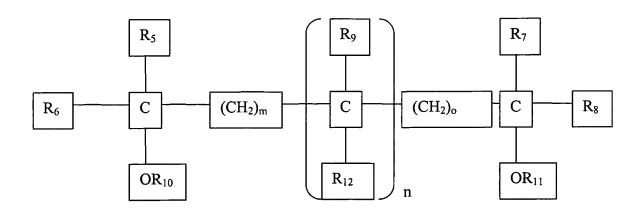


wherein R1 is selected from the group consisting of Hydroxy, Alkyloxy, Amino, Alkylamino, Dialkylamino, Arylamino, Diaryloxy, Halogen, and Cyano; and wherein R2, R3, and R4 are selected from the group consisting of Hydrogen, Alkyl, and Aryl.

45. (new) The method of Claim 43 wherein the lipid is a type of wax having the formula:

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wherein R5 to R12 are selected from the group consisting of Hydrogen, Alkyl, and Aryl;

wherein m and o are positive integers; and wherein n is at least zero.

46. (new) A method of producing a vertebrate host mimic for modifying a behavior of arthropods which are parasitic to a vertebrate host, the method comprising the steps of:

providing a lipid selected from the group consisting of glycerides, sterols, sterol esters, sterol phosphates, sterol precursors, wax, wax esters, wax alcohols, and wax aldehydes;

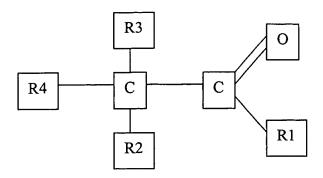
providing enzymes, the enzymes being of a type excreted by microorganisms associated with a skin of the host vertebrate and the enzymes being operative to modify the lipid;

combining the lipid and the enzymes; and collecting the modified lipid.

47. (new) The method of Claim 46 wherein the lipid is a type of glyceride having the formula:

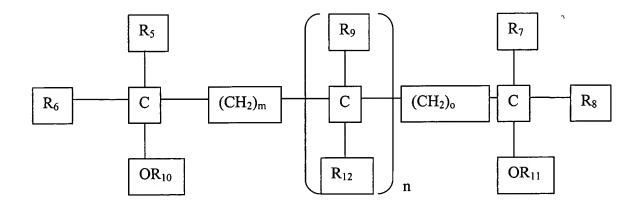
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wherein R1 is selected from the group consisting of Hydroxy, Alkyloxy, Amino, Alkylamino, Dialkylamino, Arylamino, Diaryloxy, Halogen, and Cyano; and wherein R2, R3, and R4 are selected from the group consisting of Hydrogen, Alkyl, and Aryl.

48. (new) The method of Claim 46 wherein the lipid is a type of wax having the formula:



wherein R5 to R12 are selected from the group consisting of Hydrogen, Alkyl, and Aryl;

wherein m and o are positive integers; and wherein n is at least zero.